

SMT PASSIVE DEVICE NOFLOW UNDERFILL METHODOLOGY AND
STRUCTURE

Abstract of the Disclosure

An electronic fabrication process and structure is provided for attaching
5 discrete passive surface mount devices (SMD) to a substrate in a single step.
A liquid noflow resin encapsulant containing flux material is dispensed
between presoldered pads on a substrate. The SMD, having a pair of electrical
contacts, is pressed into said encapsulant so that the electrical contacts make
contact with said presoldered pads. Heat is applied to first activate said flux
10 material and then reflow the solder on said presoldered pads to bond said SMD
contacts to said presoldered pads. The reflow temperature is maintained for
about 180 seconds during which time the resin solidifies. The resin
encapsulant fills the space between substrate and SMD and forms fillets
around the solder bonded contacts.